

#3/A

SEQUENCE LISTING

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<120> TTP-RELATED ZINC FINGER DOMAINS AND METHODS OF USE

<130> 14014.0349U2

<150> PCT/US00/22199

<151> 2000-08-14

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<151> 1999-08-13

<160> 45

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 326

<212> PRT

<213> Homo sapiens

<400> 1

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			20					25					30		
Gly	Ser	Ser	Gly	Pro	Trp	Ser	Leu	Ser	Pro	Ser	Asp	Ser	Ser	Pro	Ser
		35					40					45			
Gly	Val	Thr	Ser	Arg	Leu	Pro	Gly	Arg	Ser	Thr	Ser	Leu	Val	Glu	Gly
	50				55					60					
Arg	Ser	Cys	Gly	Trp	Val	Pro	Pro	Pro	Pro	Gly	Phe	Ala	Pro	Leu	Ala
65					70					75				80	
Pro	Arg	Leu	Gly	Pro	Glu	Leu	Ser	Pro	Ser	Pro	Thr	Ser	Pro	Thr	Ala
				85					90					95	
Thr	Ser	Thr	Thr	Pro	Ser	Arg	Tyr	Lys	Thr	Glu	Leu	Cys	Arg	Thr	Phe
			100					105					110		
Ser	Glu	Ser	Gly	Arg	Cys	Arg	Tyr	Gly	Ala	Lys	Cys	Gln	Phe	Ala	His
		115					120					125			
Gly	Leu	Gly	Glu	Leu	Arg	Gln	Ala	Asn	Arg	His	Pro	Lys	Tyr	Lys	Thr
	130					135					140				
Glu	Leu	Cys	His	Lys	Phe	Tyr	Leu	Gln	Gly	Arg	Cys	Pro	Tyr	Gly	Ser
145					150					155				160	
Arg	Cys	His	Phe	Ile	His	Asn	Pro	Ser	Glu	Asp	Leu	Ala	Ala	Pro	Gly
				165					170					175	
His	Pro	Pro	Val	Leu	Arg	Gln	Ser	Ile	Ser	Phe	Ser	Gly	Leu	Pro	Ser
			180					185					190		
Gly	Arg	Arg	Thr	Ser	Pro	Pro	Pro	Pro	Gly	Leu	Ala	Gly	Pro	Ser	Leu
		195					200					205			
Ser	Ser	Ser	Ser	Phe	Ser	Pro	Ser	Ser	Ser	Pro	Pro	Pro	Pro	Gly	Asp
	210					215					220				
Leu	Pro	Leu	Ser	Pro	Ser	Ala	Phe	Ser	Ala	Ala	Pro	Gly	Thr	Pro	Leu
225					230					235				240	
Ala	Arg	Arg	Asp	Pro	Thr	Pro	Val	Cys	Cys	Pro	Ser	Cys	Arg	Arg	Ala
				245					250					255	
Thr	Pro	Ile	Ser	Val	Trp	Gly	Pro	Leu	Gly	Gly	Leu	Val	Arg	Thr	Pro
			260					265					270		

Ser Val Gln Ser Leu Gly Ser Asp Pro Asp Glu Tyr Ala Ser Ser Gly
 275 280 285
 Ser Ser Leu Gly Gly Ser Asp Ser Pro Val Phe Glu Ala Gly Val Phe
 290 295 300
 Ala Pro Pro Gln Pro Val Ala Ala Pro Arg Arg Leu Pro Ile Phe Asn
 305 310 315 320
 Arg Ile Ser Val Ser Glu
 325

<210> 2
 <211> 338
 <212> PRT
 <213> Homo sapiens

<400> 2
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 1 5 10 15
 Leu Cys Lys Gly Asn Lys Met Leu Asn Tyr Ser Ala Pro Ser Ala Gly
 20 25 30
 Gly Cys Leu Leu Asp Arg Lys Ala Val Gly Thr Pro Ala Gly Gly Gly
 35 40 45
 Phe Pro Arg Arg His Ser Val Thr Leu Pro Ser Ser Lys Phe Arg Gln
 50 55 60
 Asn Gln Leu Leu Ser Ser Leu Lys Gly Glu Pro Ala Pro Ala Leu Ser
 65 70 75 80
 Ser Arg Asp Ser Arg Phe Arg Asp Arg Ser Phe Ser Glu Gly Gly Glu
 85 90 95
 Arg Leu Leu Pro Thr Gln Lys Gln Pro Gly Gly Gly Gln Val Asn Ser
 100 105 110
 Ser Arg Tyr Lys Thr Glu Leu Cys Arg Pro Phe Glu Glu Asn Gly Ala
 115 120 125
 Cys Lys Tyr Gly Asp Lys Cys Gln Phe Ala His Gly Ile His Glu Leu
 130 135 140
 Arg Ser Leu Thr Arg His Pro Lys Tyr Lys Thr Glu Leu Cys Arg Thr
 145 150 155 160
 Phe His Thr Ile Gly Phe Cys Pro Tyr Gly Pro Arg Cys His Phe Ile
 165 170 175
 His Asn Ala Glu Glu Arg Arg Ala Leu Ala Gly Ala Arg Asp Leu Ser
 180 185 190
 Ala Asp Arg Pro Arg Leu Gln His Ser Phe Ser Phe Ala Gly Phe Pro
 195 200 205
 Ser Ala Ala Ala Thr Ala Ala Thr Gly Leu Leu Asp Ser Pro Thr
 210 215 220
 Ser Ile Thr Pro Pro Pro Ile Leu Ser Ala Asp Asp Leu Leu Gly Ser
 225 230 235 240
 Pro Thr Leu Pro Asp Gly Thr Asn Asn Pro Phe Ala Phe Ser Ser Gln
 245 250 255
 Glu Leu Ala Ser Leu Phe Ala Pro Ser Met Gly Leu Pro Gly Gly Gly
 260 265 270
 Ser Pro Thr Thr Phe Leu Phe Arg Pro Met Ser Glu Ser Pro His Met
 275 280 285
 Phe Asp Ser Pro Pro Ser Pro Gln Asp Ser Leu Ser Asp Gln Glu Gly
 290 295 300
 Tyr Leu Ser Ser Ser Ser Ser His Ser Gly Ser Asp Ser Pro Thr
 305 310 315 320
 Leu Asp Asn Ser Arg Arg Leu Pro Ile Phe Ser Arg Leu Ser Ile Ser
 325 330 335
 Asp Asp

<210> 3
 <211> 492

<212> PRT

<213> Homo sapiens

<400> 3

Met	Ser	Thr	Thr	Leu	Leu	Ser	Ala	Phe	Tyr	Asp	Val	Asp	Phe	Leu	Cys
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Lys	Thr	Glu	Lys	Ser	Leu	Ala	Asn	Leu	Asn	Leu	Asn	Asn	Met	Leu	Asp
			20					25					30		
Lys	Lys	Ala	Val	Gly	Thr	Pro	Val	Ala	Ala	Ala	Pro	Ser	Ser	Gly	Phe
		35					40					45			
Ala	Pro	Gly	Phe	Leu	Arg	Arg	His	Ser	Ala	Ser	Asn	Leu	His	Ala	Leu
	50					55					60				
Ala	His	Pro	Ala	Pro	Ser	Pro	Gly	Ser	Cys	Ser	Pro	Lys	Phe	Pro	Gly
65					70					75					80
Ala	Ala	Asn	Gly	Ser	Ser	Cys	Gly	Ser	Ala	Ala	Ala	Gly	Gly	Pro	Thr
			85					90						95	
Ser	Tyr	Gly	Thr	Leu	Lys	Glu	Pro	Ser	Gly	Gly	Gly	Gly	Thr	Ala	Leu
			100					105					110		
Leu	Asn	Lys	Glu	Asn	Lys	Phe	Arg	Asp	Arg	Ser	Phe	Ser	Glu	Asn	Gly
		115					120					125			
Asp	Arg	Ser	Gln	His	Leu	Leu	His	Leu	Gln	Gln	Gln	Gln	Lys	Gly	Gly
	130					135					140				
Gly	Gly	Ser	Gln	Ile	Asn	Ser	Thr	Arg	Tyr	Lys	Thr	Glu	Leu	Cys	Arg
145					150					155					160
Pro	Phe	Glu	Glu	Ser	Gly	Thr	Cys	Lys	Tyr	Gly	Glu	Lys	Cys	Gln	Phe
				165				170						175	
Ala	His	Gly	Phe	His	Glu	Leu	Arg	Ser	Leu	Thr	Arg	His	Pro	Lys	Tyr
			180					185					190		
Lys	Thr	Glu	Leu	Cys	Arg	Thr	Phe	His	Thr	Ile	Gly	Phe	Cys	Pro	Tyr
		195					200					205			
Gly	Pro	Arg	Cys	His	Phe	Ile	His	Asn	Ala	Asp	Glu	Arg	Arg	Pro	Ala
	210					215					220				
Pro	Ser	Gly	Gly	Ala	Ser	Gly	Asp	Leu	Arg	Ala	Phe	Gly	Thr	Arg	Asp
225					230					235					240
Ala	Leu	His	Leu	Gly	Phe	Pro	Arg	Glu	Pro	Arg	Pro	Lys	Leu	His	His
				245					250					255	
Ser	Leu	Ser	Phe	Ser	Gly	Phe	Pro	Ser	Gly	His	His	Gln	Pro	Pro	Gly
			260					265					270		
Gly	Leu	Glu	Ser	Pro	Leu	Leu	Leu	Asp	Ser	Pro	Thr	Ser	Arg	Thr	Pro
		275					280					285			
Pro	Pro	Pro	Ser	Cys	Ser	Ser	Ala	Ser	Ser	Cys	Ser	Ser	Ser	Ala	Ser
		290				295						300			
Ser	Cys	Ser	Ser	Ala	Ser	Ala	Ala	Ser	Thr	Pro	Ser	Gly	Thr	Pro	Thr
305					310					315					320
Cys	Cys	Ala	Ser	Ala	Ala	Ala	Ala	Leu	Arg	Leu	Leu	Tyr	Gly	Thr	Gly
				325					330					335	
Gly	Ala	Glu	Asp	Leu	Leu	Ala	Pro	Gly	Ala	Pro	Cys	Ala	Ala	Cys	Ser
		340						345					350		
Ser	Ala	Ser	Cys	Ala	Asn	Asn	Ala	Phe	Ala	Phe	Gly	Pro	Glu	Leu	Ser
		355					360					365			
Ser	Leu	Ile	Thr	Pro	Leu	Ala	Ile	Gln	Thr	His	Asn	Phe	Ala	Ala	Val
	370					375					380				
Ala	Ala	Ala	Ala	Tyr	Tyr	Arg	Ser	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gly
385					390					395					400
Leu	Ala	Pro	Pro	Ala	Gln	Pro	Pro	Ala	Pro	Pro	Ser	Ala	Thr	Leu	Pro
				405					410					415	
Ala	Gly	Ala	Ala	Ala	Pro	Pro	Ser	Pro	Pro	Phe	Ser	Phe	Gln	Leu	Pro
			420					425					430		
Arg	Arg	Leu	Ser	Asp	Ser	Pro	Val	Phe	Asp	Ala	Pro	Pro	Ser	Pro	Pro
		435					440					445			
Asp	Ser	Leu	Ser	Asp	Arg	Asp	Ser	Tyr	Leu	Ser	Gly	Ser	Leu	Ser	Ser
	450					455					460				

Gly Ser Leu Ser Gly Ser Glu Ser Pro Ser Leu Asp Pro Gly Arg Arg
 465 470 475 480
 Leu Pro Ile Phe Ser Arg Leu Ser Ile Ser Asp Asp
 485 490

<210> 4
 <211> 276
 <212> PRT
 <213> *Xenopus laevis*

<400> 4
 Met Glu Ile Ser Asn Asp Ser Leu Asp Leu Phe Ser Ser Phe Phe Pro
 1 5 10 15
 Gln Leu Ser Pro Pro Ala Asp Pro Glu Thr Pro Leu Leu Pro Ser Phe
 20 25 30
 Ser Ala Pro Pro Lys His Leu Ser Leu Ser Ser Leu Arg Tyr Lys Thr
 35 40 45
 Glu Leu Cys Ser Arg Tyr Ala Glu Ser Gly Phe Cys Ala Tyr Arg Asn
 50 55 60
 Arg Cys Gln Phe Ala His Gly Leu Ser Glu Leu Arg Pro Pro Val Gln
 65 70 75 80
 His Pro Lys Tyr Lys Thr Glu Leu Cys Arg Ser Phe His Val Leu Gly
 85 90 95
 Thr Cys Asn Tyr Gly Leu Arg Cys Leu Phe Ile His Ser Pro Gln Glu
 100 105 110
 Arg Arg Glu Pro Pro Val Leu Pro Asp Asn Leu Ser Leu Pro Pro Arg
 115 120 125
 Arg Tyr Gly Gly Pro Tyr Arg Glu Arg Cys Arg Leu Trp Ser Ala Pro
 130 135 140
 Gly Gly Cys Pro Tyr Gly Ala Arg Cys His Phe Gln His Pro Lys Ser
 145 150 155 160
 Ala Arg Glu Thr Cys Arg His Phe Ala Ala Leu Gly Asp Cys Pro Tyr
 165 170 175
 Gly Ala Cys Cys His Phe Ser His Ser Pro Pro Leu Asp Arg Trp Gly
 180 185 190
 Ser Gly Thr Lys Asn Ser Ser Gly Ser Leu Ser Pro Ser Asp Pro Asp
 195 200 205
 Ser Asp Pro Asp Thr Pro Val Leu Ser Glu Ser Pro Ala Asn Asn Ala
 210 215 220
 Phe Ser Phe Ser Ser Leu Leu Leu Pro Leu Ala Leu Arg Leu Gln Ile
 225 230 235 240
 Leu Gly Asp Asp Asp Leu Pro Thr Ala Ser Asp Pro Leu Pro Gly Asp
 245 250 255
 Asp Thr Asp Leu Leu Pro Gly Asp Glu Glu Ile Ala Gln Gly Leu Leu
 260 265 270
 Ser Val Leu Gly
 275

<210> 5
 <211> 327
 <212> PRT
 <213> *Cyprinus carpio*

<400> 5
 Met Phe Glu Thr Ser Thr Asp Asn Leu Phe Leu Phe Pro Thr Glu Gly
 1 5 10 15
 Leu Asn Glu Ala Phe Phe Pro Glu Glu Gly Leu Ala Ser Gly Ser Leu
 20 25 30
 Ser Leu Ala Lys Ala Leu Leu Pro Leu Val Glu Ser Pro Ser Pro Pro
 35 40 45
 Met Thr Pro Trp Leu Cys Ser Thr Arg Tyr Lys Thr Glu Leu Cys Ser
 50 55 60

Arg Tyr Ala Glu Thr Gly Thr Cys Lys Tyr Ala Glu Arg Cys Gln Phe
 65 70 75 80
 Ala His Gly Leu His Asp Leu His Val Pro Ser Arg His Pro Lys Tyr
 85 90 95
 Lys Thr Glu Leu Cys Arg Thr Tyr His Thr Ala Gly Tyr Cys Val Tyr
 100 105 110
 Gly Thr Arg Cys Leu Phe Val His Asn Leu Lys Glu Gln Arg Pro Val
 115 120 125
 Arg Gln Arg Cys Arg Asn Val Pro Cys Arg Thr Phe Arg Ala Phe Gly
 130 135 140
 Val Cys Pro Phe Gly Thr Arg Cys His Phe Leu His Val Glu Gly Gly
 145 150 155 160
 Ser Glu Ser Asp Gly Gly Glu Glu Glu Gln Thr Cys Gln Pro Met Ser
 165 170 175
 Gln Ser Gln Glu Trp Lys Pro Arg Gly Ala Leu Cys Arg Thr Phe Ser
 180 185 190
 Ala Phe Gly Phe Cys Leu Tyr Gly Thr Arg Cys Arg Phe Gln His Gly
 195 200 205
 Leu Pro Asn Ser Ile Lys Gly Val Asn Ser Thr His Thr Ser Trp Pro
 210 215 220
 His Gln Met Thr Asn Arg Gly Ser Leu Ser Pro Val Ser Asp Ala Cys
 225 230 235 240
 Ser Ser Gln Ser Pro Pro Ser Ser Val Pro Ser Val Cys Val Gly Phe
 245 250 255
 Ala Val Tyr Pro Glu Gly Ser Gly Pro Val Thr Pro Pro Ser Val Glu
 260 265 270
 Ala Val Ala Asn Asn Ala Phe Thr Phe Ser Ser Gln His Leu Asn Asp
 275 280 285
 Leu Leu Leu Pro Leu Ala Leu Arg Leu Gln Gln Leu Glu Asn Val Thr
 290 295 300
 Asn Ala Gly Pro Gln Asp Ala Val Asp Lys Pro Leu Leu Leu Ser Leu
 305 310 315 320
 Trp Gln Asp Asp Pro Arg Ser
 325

<210> 6
 <211> 319
 <212> PRT
 <213> Danio rerio

<400> 6
 Met Phe Glu Thr Ser Gln Asp Asp Leu Phe Leu Phe Pro Thr Glu Gly
 1 5 10 15
 Leu Asn Glu Ala Phe Phe Pro Glu Glu Gly Leu Gly Gly Gly Gly Gly
 20 25 30
 Gly Leu Ser Leu Ala Glu Ala Leu Leu Pro Leu Val Glu Ser Pro Ser
 35 40 45
 Pro Pro Met Thr Pro Trp Leu Cys Ser Thr Arg Tyr Lys Thr Glu Leu
 50 55 60
 Cys Ser Arg Tyr Ala Glu Thr Gly Thr Cys Lys Tyr Ala Glu Arg Cys
 65 70 75 80
 Gln Phe Ala His Gly Leu His Asp Leu His Val Pro Ser Arg His Pro
 85 90 95
 Lys Tyr Lys Thr Glu Leu Cys Arg Thr Tyr His Thr Ala Gly Tyr Cys
 100 105 110
 Val Tyr Gly Thr Arg Cys Leu Phe Val His Asn Leu Lys Glu Gln Arg
 115 120 125
 Pro Ile Arg Pro Arg Arg Arg Asn Val Pro Cys Arg Thr Phe Arg Ala
 130 135 140
 Phe Gly Val Cys Pro Phe Gly Asn Arg Cys His Phe Leu His Val Glu
 145 150 155 160
 Gly Gly Ser Glu Ser Asp Gly Ala Glu Glu Glu Gln Thr Trp Gln Pro

165 170 175
 Pro Ser Gln Ser Gln Glu Trp Lys Pro Arg Gly Ala Leu Cys Arg Thr
 180 185 190
 Phe Ser Ala Phe Gly Phe Cys Leu Tyr Gly Thr Arg Cys Arg Phe Gln
 195 200 205
 His Gly Leu Pro Asn Thr Ile Lys Gly His Asn Ala Asn His Thr Ser
 210 215 220
 Trp Pro Gln Gln Met Thr Asn Gly Gly Ser Ile Ser Pro Ile Ser Asp
 225 230 235 240
 Thr Cys Thr Ser Pro Ser Pro Pro Ser Ser Ser Pro Thr Ser Ala Leu
 245 250 255
 Pro Ser Pro Val Tyr Pro Asp Ser Ser Gly Pro Ile Thr Pro Pro Ser
 260 265 270
 Val Glu Ala Val Ala Asn Asn Ala Phe Thr Phe Ser Ser Gln His Leu
 275 280 285
 Asn Asp Leu Leu Leu Pro Leu Ala Leu Arg Leu Gln Gln Leu Glu Lys
 290 295 300
 Ala Ala Ser Ala Gly Pro Gln Asp Val Leu Asp Lys Pro Leu Leu
 305 310 315

<210> 7
 <211> 64
 <212> PRT
 <213> Rattus norvegicus

<400> 7
 Arg Tyr Lys Thr Glu Leu Cys Arg Pro Phe Glu Glu Asn Gly Ala Cys
 1 5 10 15
 Lys Tyr Gly Asp Lys Cys Gln Phe Ala His Gly Ile His Glu Leu Arg
 20 25 30
 Ser Leu Thr Arg His Pro Lys Tyr Lys Thr Glu Leu Cys Arg Thr Phe
 35 40 45
 His Thr Ile Gly Phe Cys Pro Tyr Gly Pro Arg Cys His Phe Ile His
 50 55 60

<210> 8
 <211> 64
 <212> PRT
 <213> Homo sapiens

<400> 8
 Arg Tyr Lys Thr Glu Leu Cys Arg Pro Phe Glu Glu Asn Gly Ala Cys
 1 5 10 15
 Lys Tyr Gly Asp Lys Cys Gln Phe Ala His Gly Ile His Glu Leu Arg
 20 25 30
 Ser Leu Thr Arg His Pro Lys Tyr Lys Thr Glu Leu Cys Arg Thr Phe
 35 40 45
 His Thr Ile Gly Phe Cys Pro Tyr Gly Pro Arg Cys His Phe Ile His
 50 55 60

<210> 9
 <211> 64
 <212> PRT
 <213> Mus musculus

<400> 9
 Arg Tyr Lys Thr Glu Leu Cys Arg Pro Phe Glu Glu Asn Gly Ala Cys
 1 5 10 15
 Lys Tyr Gly Asp Lys Cys Gln Phe Ala His Gly Ile His Glu Leu Arg
 20 25 30
 Ser Leu Thr Arg His Pro Lys Tyr Lys Thr Glu Leu Cys Arg Thr Phe
 35 40 45

His Thr Ile Gly Phe Cys Pro Tyr Gly Pro Arg Cys His Phe Ile His
 50 55 60

<210> 10
 <211> 64
 <212> PRT
 <213> *Xenopus laevis*

<400> 10
 Arg Tyr Lys Thr Glu Leu Cys Arg Pro Phe Glu Glu Asn Gly Ser Cys
 1 5 10 15
 Lys Tyr Gly Asp Lys Cys Gln Phe Ala His Gly Ile His Glu Leu Arg
 20 25 30
 Ser Leu Thr Arg His Pro Lys Tyr Lys Thr Glu Leu Cys Arg Thr Phe
 35 40 45

His Thr Ile Gly Phe Cys Pro Tyr Gly Pro Arg Cys His Phe Ile His
 50 55 60

<210> 11
 <211> 64
 <212> PRT
 <213> *Homo sapiens*

<400> 11
 Arg Tyr Lys Thr Glu Leu Cys Arg Pro Phe Glu Glu Ser Gly Thr Cys
 1 5 10 15
 Lys Tyr Gly Glu Lys Cys Gln Phe Ala His Gly Phe His Glu Leu Arg
 20 25 30
 Ser Leu Thr Arg His Pro Lys Tyr Lys Thr Glu Leu Cys Arg Thr Phe
 35 40 45
 His Thr Ile Gly Phe Cys Pro Tyr Gly Pro Arg Cys His Phe Ile His
 50 55 60

<210> 12
 <211> 64
 <212> PRT
 <213> *Mus musculus*

<400> 12
 Arg Tyr Lys Thr Glu Leu Cys Arg Pro Phe Glu Glu Ser Gly Thr Cys
 1 5 10 15
 Lys Tyr Gly Glu Lys Cys Gln Phe Ala His Gly Phe His Glu Leu Arg
 20 25 30
 Ser Leu Thr Arg His Pro Lys Tyr Lys Thr Glu Leu Cys Arg Thr Phe
 35 40 45
 His Thr Ile Gly Phe Cys Pro Tyr Gly Pro Arg Cys His Phe Ile His
 50 55 60

<210> 13
 <211> 64
 <212> PRT
 <213> *Xenopus laevis*

<400> 13
 Arg Tyr Lys Thr Glu Leu Cys Arg Pro Phe Glu Glu Asn Gly Ala Cys
 1 5 10 15
 Lys Tyr Gly Glu Lys Cys Gln Phe Ala His Gly Phe His Glu Leu Arg
 20 25 30
 Ser Leu Thr Arg His Pro Lys Tyr Lys Thr Glu Leu Cys Arg Thr Phe
 35 40 45
 His Thr Ile Gly Phe Cys Pro Tyr Gly Pro Arg Cys His Phe Ile His

50

55

60

<210> 14
 <211> 64
 <212> PRT
 <213> *Xenopus laevis*

<400> 14
 Arg Tyr Lys Thr Glu Leu Cys Arg Pro Phe Glu Glu Ser Gly Ala Cys
 1 5 10 15
 Lys Tyr Gly Glu Lys Cys Gln Phe Ala His Gly Phe His Glu Leu Arg
 20 25 30
 Ser Leu Thr Arg His Pro Lys Tyr Lys Thr Glu Leu Cys Arg Thr Phe
 35 40 45
 His Thr Ile Gly Phe Cys Pro Tyr Gly Pro Arg Cys His Phe Ile His
 50 55 60

<210> 15
 <211> 64
 <212> PRT
 <213> *Homo sapiens*

<400> 15
 Arg Tyr Lys Thr Glu Leu Cys Arg Thr Phe Ser Glu Ser Gly Arg Cys
 1 5 10 15
 Arg Tyr Gly Ala Lys Cys Gln Phe Ala His Gly Leu Gly Glu Leu Arg
 20 25 30
 Gln Ala Asn Arg His Pro Lys Tyr Lys Thr Glu Leu Cys His Lys Phe
 35 40 45
 Tyr Leu Gln Gly Arg Cys Pro Tyr Gly Ser Arg Cys His Phe Ile His
 50 55 60

<210> 16
 <211> 64
 <212> PRT
 <213> *Bos taurus*

<400> 16
 Arg Tyr Lys Thr Glu Leu Cys Arg Thr Phe Ser Glu Ser Gly Arg Cys
 1 5 10 15
 Arg Tyr Gly Ala Lys Cys Gln Phe Ala His Gly Leu Gly Glu Leu Arg
 20 25 30
 Gln Ala Asn Arg His Pro Lys Tyr Lys Thr Glu Leu Cys His Lys Phe
 35 40 45
 Tyr Leu Gln Gly Arg Cys Pro Tyr Gly Ser Arg Cys His Phe Ile His
 50 55 60

<210> 17
 <211> 64
 <212> PRT
 <213> *Mus musculus*

<400> 17
 Arg Tyr Lys Thr Glu Leu Cys Arg Thr Tyr Ser Glu Ser Gly Arg Cys
 1 5 10 15
 Arg Tyr Gly Ala Lys Cys Gln Phe Ala His Gly Leu Gly Glu Leu Arg
 20 25 30
 Gln Ala Asn Arg His Pro Lys Tyr Lys Thr Glu Leu Cys His Lys Phe
 35 40 45

Tyr Leu Gln Gly Arg Cys Pro Tyr Gly Ser Arg Cys His Phe Ile His
 50 55 60

<210> 18
 <211> 64
 <212> PRT
 <213> Rattus norvegicus

<400> 18
 Arg Tyr Lys Thr Glu Leu Cys Arg Thr Tyr Ser Glu Ser Gly Arg Cys
 1 5 10 15
 Arg Tyr Gly Ala Lys Cys Gln Phe Ala His Gly Pro Gly Glu Leu Arg
 20 25 30
 Gln Ala Asn Arg His Pro Lys Tyr Lys Thr Glu Leu Cys His Lys Phe
 35 40 45
 Tyr Leu Gln Gly Arg Cys Pro Tyr Gly Ser Arg Cys His Phe Ile His
 50 55 60

<210> 19
 <211> 64
 <212> PRT
 <213> Xenopus laevis

<400> 19
 Arg Tyr Lys Thr Glu Leu Cys Arg Thr Phe Ser Glu Thr Gly Thr Cys
 1 5 10 15
 Lys Tyr Gly Ala Lys Cys Gln Phe Ala His Gly Lys Ile Glu Leu Arg
 20 25 30
 Glu Pro Asn Arg His Pro Lys Tyr Lys Thr Glu Leu Cys His Lys Phe
 35 40 45
 Tyr Leu Tyr Gly Glu Cys Pro Tyr Gly Ser Arg Cys Asn Phe Ile His
 50 55 60

<210> 20
 <211> 64
 <212> PRT
 <213> Cyprinus carpio

<400> 20
 Arg Tyr Lys Thr Glu Leu Cys Ser Arg Tyr Ala Glu Thr Gly Thr Cys
 1 5 10 15
 Lys Tyr Ala Glu Arg Cys Gln Phe Ala His Gly Leu His Asp Leu His
 20 25 30
 Val Pro Ser Arg His Pro Lys Tyr Lys Thr Glu Leu Cys Arg Thr Tyr
 35 40 45
 His Thr Ala Gly Tyr Cys Val Tyr Gly Thr Arg Cys Leu Phe Val His
 50 55 60

<210> 21
 <211> 64
 <212> PRT
 <213> Danio rerio

<400> 21
 Arg Tyr Lys Thr Glu Leu Cys Ser Arg Tyr Ala Glu Thr Gly Thr Cys
 1 5 10 15
 Lys Tyr Ala Glu Arg Cys Gln Phe Ala His Gly Leu His Asp Leu His
 20 25 30
 Val Pro Ser Arg His Pro Lys Tyr Lys Thr Glu Leu Cys Arg Thr Tyr
 35 40 45

His Asn Ala Gly Tyr Cys Val Tyr Val Thr Arg Cys Leu Phe Val His
 50 55 60

<210> 22
 <211> 64
 <212> PRT
 <213> *Xenopus laevis*

<400> 22
 Arg Tyr Lys Thr Glu Leu Cys Ser Arg Tyr Ala Glu Ser Gly Phe Cys
 1 5 10 15

Ala Tyr Arg Asn Arg Cys Gln Phe Ala His Gly Leu Ser Glu Leu Arg
 20 25 30
 Pro Pro Val Gln His Pro Lys Tyr Lys Thr Glu Leu Cys Arg Ser Phe
 35 40 45
 His Val Leu Gly Thr Cys Asn Tyr Gly Leu Arg Cys Leu Phe Ile His
 50 55 60

<210> 23
 <211> 77
 <212> PRT
 <213> *Homo sapiens*

<400> 23
 Thr Ser Thr Thr Pro Ser Arg Tyr Lys Thr Glu Leu Cys Arg Thr Phe
 1 5 10 15
 Ser Glu Ser Gly Arg Cys Arg Tyr Gly Ala Lys Cys Gln Phe Ala His
 20 25 30
 Gly Leu Gly Glu Leu Arg Gln Ala Asn Arg His Pro Lys Tyr Lys Thr
 35 40 45
 Glu Leu Cys His Lys Phe Tyr Leu Gln Gly Arg Cys Pro Tyr Gly Ser
 50 55 60
 Arg Cys His Phe Ile His Asn Pro Ser Glu Asp Leu Ala
 65 70 75

<210> 24
 <211> 241
 <212> RNA
 <213> *Mus musculus*

<400> 24
 gaauucacug gagccucgaa uguccauucc ugaguucugc aaagggagag uggucagguu 60
 gccucugucu cagaugagg cuggauaaga ucucaggccu uccuaccuuc agaccuuucc 120
 agacucuucc cugaggugca augcacagcc uuccucacag agccagcccc ccucuaauua 180
 uauuugcacu uauuauuuau uauuuauuaa uuauuuauuu auuugcuuau gaaugauuu 240
 a 241

<210> 25
 <211> 70
 <212> RNA
 <213> *Mus musculus*

<400> 25
 cucuaauuuau auuugcacuu auuauuuauu auuuauuuau uauuuauuaa uuugcuuaug 60
 aaugauuuua 70

<210> 26
 <211> 6
 <212> PRT
 <213> *Homo sapiens*

<400> 26
Arg Tyr Lys Thr Glu Leu
1 5

<210> 27
<211> 6
<212> PRT
<213> Homo sapiens

<220>
<221> VARIANT
<222> (0)...(0)
<223> Xaa = R or K

<400> 27
Xaa Tyr Lys Thr Glu Leu
1 5

<210> 28
<211> 27
<212> DNA
<213> Mus Musculus

<400> 28
gtcgacactc agagagaaag gctaagg 27

<210> 29
<211> 23
<212> DNA
<213> Mus musculus

<400> 29
cattcaaagg ggatatcagt cag 23

<210> 30
<211> 27
<212> DNA
<213> Homo sapiens

<400> 30
gtggcttcta gatgcatggg tggcatc 27

<210> 31
<211> 29
<212> DNA
<213> Homo sapiens

<400> 31
gaaggacacc tctagagaca aaatgatgc 29

<210> 32
<211> 23
<212> DNA
<213> Mus musculus

<400> 32
ctttccgaat tcaactggagc etc 23

<210> 33
<211> 29
<212> DNA

<213> Mus musculus

<400> 33
tagatctaga agcgatcttt atttctctc 29

<210> 34
<211> 20
<212> DNA
<213> Mus musculus

<400> 34
gataagatct caggccttcc 20

<210> 35
<211> 27
<212> DNA
<213> Mus musculus

<400> 35
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<400> 41
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<220>
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24